

REMARKS

An Information Disclosure Statement was filed on November 12, 2004. It is respectfully requested that an initialed copy of the PTO-1449 form submitted therewith be sent to the undersigned attorney.

New independent Claim 13 defines the invention as a method of manufacturing a vehicle frame assembly. Initially, a first vehicle frame member is provided by (1) positioning a hollow member within a die cavity defined by a die, (2) filling the hollow member with a fluid, and (3) creating a single shock wave within the fluid to rapidly expand the hollow member into conformance with the die cavity. Then, second, third, and fourth vehicle frame members are provided. Lastly, the first vehicle frame member and the plurality of second vehicle frame members are secured together to form a vehicle frame assembly.

The Roper reference discloses a method of manufacturing a vehicle frame assembly using conventional hydroforming techniques, i.e., not using the claimed high velocity hydroforming method wherein a shock wave is created within the fluid to rapidly expand the hollow member into conformance with the die cavity. The Smith and Chelminski references disclose the use of high velocity hydroforming techniques, but neither of such references relates to the manufacture of a vehicle frame assembly, as specifically claimed. A person of ordinary skill in the art would not find the teachings of the Smith and Chelminski references relevant to the manufacture of vehicle frame assemblies. The Smith reference discloses a two-stage manufacturing process that includes (1) an initial conventional hydroforming stage that is performed at a relatively low velocity and (2) a subsequent high velocity hydroforming stage. This is quite different from the claimed invention, wherein a single shock wave is created within the fluid to rapidly expand the hollow member into conformance with

the die cavity. Thus, it is believed that new independent Claim 13 defines the invention over the art of record.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Richard S. MacMillan", written over a horizontal line.

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